

AMENDMENTS TO THE CLAIMS

Please amend Claims 1, 4-6 and 8-18; and, add new Claims 19 and 20 as follows.

LISTING OF CLAIMS

1. (currently amended) A ventilation system for a vehicle, comprising:

a ventilating unit which performs a ventilation of a passenger compartment using power from a battery of the vehicle while the vehicle [[stops]] is stopped in a vehicle state where the battery is disconnected from a driving source of the vehicle, and no passenger exists in the vehicle;

a non-contact temperature sensor which detects infrared rays radiated from a predetermined area of the passenger compartment and detects a surface temperature in the predetermined area [[in]] by non-contact based on the detected infrared rays, using the power of the battery disconnected from the driving source; [[and]]

ventilation determining means for determining whether the ventilation by the ventilating unit needs to be started based on the surface temperature detected by the non-contact temperature sensor[[.]] using the power of the battery disconnected from the driving source; and

when the determining means determines that the ventilation by the ventilating unit needs to be started, the ventilating unit performs the ventilation using the power of the battery that is disconnected from the driving source of the vehicle.

2. (previously presented) The ventilation system according to claim 1, further comprising:

reservation means for reserving performance of the ventilation by the ventilating unit in advance.

3. (previously presented) The ventilation system according to claim 1, further comprising distance determining means for determining a distance between a user and the vehicle, wherein:

the distance determining means determines an approach of the user to the vehicle based on the detected distance between the user and the vehicle when the detected distance between the user and the vehicle is smaller than a predetermined value; and

the ventilation determining means determines whether the ventilation by the ventilating unit needs to be started, when the distance determining means determines the approach of the user.

4. (currently amended) The ventilation system according to claim 1, wherein the non-contact temperature sensor detects ~~[[a]]~~ the surface temperature in the predetermined area including a seat where no passenger exists in the passenger compartment ~~in non-contact~~.

5. (currently amended) An air conditioner for a vehicle, comprising:

an air conditioning unit which controls an air condition in a passenger compartment using power from a battery of the vehicle while the vehicle ~~[[stops]]~~ is stopped in a vehicle state where the battery is disconnected from a driving source of the vehicle, and no passenger exists in the vehicle;

a non-contact temperature sensor which detects infrared rays radiated from a predetermined area of the passenger compartment and detects a surface temperature in the predetermined area ~~[[in]]~~ by non-contact based on the detected infrared rays, using the power of the battery disconnected from the driving source;
~~[[and]]~~

air-conditioning determining means for determining whether an air conditioning control by the air conditioning unit needs to be started based on the surface temperature detected by the non-contact temperature sensor~~[[.]]~~ using the power of the battery disconnected from the driving source; and

when the determining means determines that the air conditioning control by the air conditioning unit needs to be started, the air conditioning unit performs the air conditioning control using the power of the battery that is disconnected from the driving source of the vehicle.

6. (currently amended) The air conditioner according to claim 5, further comprising:

selecting means for selecting a level of the air condition controlled by the air conditioning unit ~~in advance~~ based on the surface temperature and a battery voltage.

7. (previously presented) The air conditioner according to claim 5, further comprising distance determining means for detecting a distance between a user and the vehicle, wherein:

the distance determining means determines an approach of the user to the vehicle based on the detected distance between the user and the vehicle when the distance between the user and the vehicle is smaller than a predetermined value; and

the air-conditioning determining means determines whether the air conditioning control by the air conditioning unit needs to be started, when the distance determining means determines the approach of the user.

8. (currently amended) The air conditioner according to claim 5, wherein the non-contact temperature sensor detects ~~[[a]]~~ the surface temperature in the predetermined area including a seat where no passenger exists in the passenger compartment ~~in non-contact~~.

9. (currently amended) A control system for controlling a vehicle ventilation system, the vehicle ventilation system including a ventilating unit for ventilating a passenger compartment using power from a battery of the vehicle while the vehicle ~~[[stops]]~~ is stopped in a vehicle state where the battery is disconnected from a driving source of the vehicle, and no passenger exists in the vehicle, and a non-contact temperature sensor for detecting infrared rays radiated from a predetermined area and determining a surface temperature of the predetermined area ~~[[in]]~~ by non-contact

based on the detected infrared rays, using the power of the battery disconnected from the driving source, the control system comprising:

determining means for determining whether a ventilating by the ventilating unit needs to be started based on the surface temperature detected by the non-contact temperature sensor~~[[.]]~~using the power of the batter disconnected from the driving source; and

when the determining means determines that the ventilation by the ventilating unit needs to be started, the ventilating unit performs the ventilation using the power of the battery that is disconnected from the driving source of the vehicle; and

when the determining means determines that the ventilation by the ventilating unit needs to be started, the ventilating unit performs the ventilation for a predetermined time using the power of the battery that is disconnected from the driving source of the vehicle.

10. (currently amended) A control system for controlling a vehicle air conditioner, the vehicle air conditioner includes an air conditioning unit for controlling air condition in a passenger compartment using power from a battery of the vehicle while a vehicle ~~[[stops]]~~ is stopped in a vehicle state where the battery is disconnected from a driving source of the vehicle, and no passenger exists in the vehicle, and a non-contact temperature sensor for detecting infrared rays radiated from a predetermined area and determining a surface temperature of the predetermined area ~~[[in]]~~ by non-contact based on the detected infrared rays, using the power of the battery disconnected from the driving source, the control system comprising:

determining means for determining whether an air conditioning control by the air conditioning unit needs to be started based on the surface temperature detected by the non-contact temperature sensor[[.]]using the power of the battery disconnected from the driving source; and

when the determining means determines that the air conditioning control by the air conditioning unit needs to be started, the air conditioning unit performs the air conditioning control using the power of the battery that is disconnected from the driving source of the vehicle; and

when the determining means determines that the air conditioning control by the air conditioning unit needs to be started, the air conditioning unit performs the air conditioning control for a predetermined time using the power of the battery that is disconnected from the driving source of the vehicle.

11. (currently amended) The ventilation system according to claim 1, wherein the ventilation determining means determines whether a switch for giving permission to supply electric power to [[a]] the driving equipment source of the vehicle is switched off, and whether the ventilation needs to be started when the switch is switched off[[.]]; and

when the determining means determines that the ventilation needs to be started when the switch is switched off, the ventilating unit performs the ventilation using the power of the battery that is disconnected from the driving source of the vehicle.

12. (currently amended) The ventilation system according to claim 1, further comprising:

battery capacity determining means for determining whether capacity of
[[a]] the battery is larger than a predetermined level; and

ventilation starting means for starting the ventilation in the passenger compartment when the battery capacity determining means determines that the capacity of the battery is larger than the predetermined level and the ventilation determining means determines that the ventilation needs to be started.

13. (currently amended) The ventilation system according to claim 5, wherein the air-conditioning determining means determines whether a switch for giving permission to supply electric power to [[a]] the driving ~~equipment~~ source of the vehicle is switched off, and whether the air conditioning control needs to be started when the switch is switched off[[.]]; and

when the determining means determines that the ventilation needs to be started when the switch is switched off, the ventilating unit performs the ventilation using the power of the battery that is disconnected from the driving source of the vehicle.

14. (currently amended) The air conditioner according to claim 5, further comprising:

battery capacity determining means for determining whether capacity of
[[a]] the battery is larger than a predetermined level; and

air-conditioning starting means for starting the air conditioning control in the passenger compartment when the battery capacity determining means determines that the capacity of the battery is larger than the predetermined level and the air-

conditioning determining means determines that the air conditioning needs to be started.

15. (currently amended) The control system according to claim 9, wherein the determining means determines whether a switch for giving permission to supply electric power to [[a]] the driving equipment source of the vehicle is switched off, and whether the ventilation needs to be started when the switch is switched off[[.]]; and

when the determining means determines that the ventilation needs to be started when the switch is switched off, the ventilating unit performs the ventilation using the power of the battery that is disconnected from the driving source of the vehicle.

16. (currently amended) The control system according to claim 9, further comprising:

battery capacity determining means for determining whether capacity of [[a]] the battery is larger than a predetermined level while the vehicle stops and a vehicle generator does not generate; and

ventilation starting means for starting the ventilation in the passenger compartment when the battery capacity determining means determines that the capacity of the battery is larger than the predetermined level and the determining means determines that the ventilation needs to be started.

17. (currently amended) The control system according to claim 10, wherein the determining means determines whether a switch for giving permission to supply

electric power to ~~[[a]] the driving equipment~~ source of the vehicle is switched off, and whether the air conditioning control needs to be started when the switch is switched off~~[[.]]; and~~

when the determining means determines that the ventilation needs to be started when the switch is switched off, the ventilating unit performs the ventilation using the power of the battery that is disconnected from the driving source of the vehicle.

18. (currently amended) The control system according to claim 10, further comprising:

battery capacity determining means for determining whether capacity of ~~[[a]] the~~ battery is larger than a predetermined level while the vehicle ~~[[stops]]~~ is stopped and a vehicle generator does not generate; and

air-conditioning starting means for starting the air conditioning control in the passenger compartment when the battery capacity determining means determines that the capacity of the battery is larger than the predetermined level and the determining means determines that the air conditioning needs to be started.

19. (new) The ventilation system according to claim 1, wherein the ventilating unit performs the ventilation while the driving source is stopped.

20. (new) The ventilation system according to claim 12, wherein the predetermined level is between a first level necessary for vehicle operation and a second level which is full capacity for the battery.